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EXAMINER				
GUIDOTTI, LAURA COLE				
ART UNIT		PAPER NUMBER		
3723				
MAIL DATE		DELIVERY MODE		
07/02/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/697,213

Applicant(s)

JIMENEZ ET AL.

Examiner

Laura C. Guidotti

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 45,47-49,77 and 79-87 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 45,47-49,77 and 79-87 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 29 April 2008 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 45, 47-49, and 77-87 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The amended claim now recites "...wherein no portion of any of the third cleaning elements and no portion of the head extends outwardly beyond the second surface under any condition." This is considered to be new matter as it was not described in the original disclosure or shown in the drawings. The elected invention is Figures 13-16 (response of 07 February 2005). Figure 15 clearly shows that a portion of the head extends outwardly beyond the

second surface in the condition shown in that Figure, see also Specification Page 29 Lines 13-20 which includes the recitation "...a central movable portion 1517 of head 1514 may be deflected downward...when a certain force is applied..." In addition, in the Specification Page 29 Lines 21-23, it is pointed out that there is elastomeric material 1320, 1420, and 1520. After further review of the drawings, neither the specification nor drawings provide support for the claimed subject matter of "a discontinuity in the form of an opening in the head positioned between an inner end of each of at least one of the plurality of third cleaning elements and a plane defined by the second surface..." as recited in claim 45. The Examiner apologizes for not recognizing this deficiency earlier in prosecution, but it nearly appears that the regions marked 1420 and 1520 in the drawings are openings, however the Examiner was misconceived and interpreted the drawings incorrectly. Any further clarification by the Applicant would be appreciated.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 45, 47-49, 77, and 79-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urbush, US 3,316,576 in view of Hallock, US 2,266,195.

Urbush discloses a toothbrush comprising a handle (12), a head (18; the head is a conventional toothbrush) connected to the handle by a neck element (14), and a mechanical vibratory device (portions 40, 41, 42, 43) that causes the head to vibrate (via 21; Column 2 Lines 33-39). Regarding claim 77, the mechanical vibratory device is located in the region adjacent to the head (see Figures) and is operatively connected to an electric power source (Column 1 Lines 9-11; Column 2 Lines 38-39). Urbush utilizes as its head a conventional toothbrush (Column 1 Lines 48-49) and the device is capable of using various sizes and types of conventional toothbrushes in the vibratory portion (Column 1 Lines 13-20). Urbush does not include a head comprising movable elements.

Hallock discloses the claimed invention including a head (unlabeled, uppermost portion of toothbrush above handle 10 as shown in Figures 1-2) having a first surface (rightmost surface facing right in Figure 2) and a second surface (leftmost surface facing left in Figure 2), a first cleaning element extending from the first surface that is non-movable relative to the head (one of the tufts "19" farthest from the handle 10), a second cleaning element extending from the first surface that is non-movable relative to the head (tufts "16" nearest to the handle 10), a plurality of third cleaning elements

disposed between the first and second cleaning elements (14) and being movable relative to the head (Figures 5-6; Page 1 Column 2 Lines 13-22), and a discontinuity in the form of an opening in the head positioned between an inner end of each of at least one of the plurality of third cleaning elements and a plane defined by the second surface (the opening is the unlabeled open area where 13 moves through shown in Figures 5-6, the plane is the plane through which the surface extends), to allow for movement of the at least one of the plurality of third cleaning elements relative to the head (the opening is the unlabeled open area where 13 moves through shown in Figures 5-6), the discontinuity being defined only by the head and the inner end of at least one of said plurality of third cleaning elements (the discontinuity or opening is defined only by the head and the inner end of at least one of the cleaning elements, as shown in the Figures, and then is defined by the inner end of the third cleaning elements as they pivot it changes geometry), wherein no portion of any of the third cleaning elements and no portion of the head extends outwardly beyond the second surface under any condition ("any condition" could be only the condition shown in Figure 6 where no portion of any of the third cleaning elements and no portion of the head extends outwardly beyond the second surface). The toothbrush is designed for adapting to conform to the contours of teeth (Page 1 Column 1 Lines 1-6). Regarding claim 47, there is at least one additional cleaning element included in an area between the first or second and third cleaning elements (additional rows of bristle tufts 16 or 19 see Figures). Regarding claim 48, the third cleaning elements comprise movable wipers (the third cleaning elements 14 are tufts of bristles which act as wipers). Regarding

claim 79, the discontinuity is on the second surface opposite at least one of the plurality of third cleaning elements (see Figures 5-6). Regarding claim 49, the movable wipers are mounted on a resilient membrane (13 itself is considered to be a resilient membrane, or alternatively 12 could be considered to be a resilient membrane; see also Page 1 Column 1 Line 53 to Column 2 Line 8) and the movable wipers rotate towards one another upon application of sufficient force on the toothbrush and away from each other upon release of that force (Figures 5-6). Regarding claims 80-81, at least one of the plurality of third cleaning elements is movable toward at least one of and each of the first and second cleaning elements (as the third cleaning elements pivot in Figure 6, they move towards the second cleaning elements and are capable of being movable toward each of the first and second cleaning elements; see Figures 5-6). Regarding claims 82-84, there is a fourth cleaning element disposed between the first cleaning element and at least one of the plurality of third cleaning elements (the fourth cleaning element is one of the inner tufts 16 or 19 between the first cleaning element and the third cleaning elements, see Figures 1-2), at least one of the plurality of third cleaning elements is movable toward at least one of and each of the first and fourth cleaning elements (see Figure 6).

It would have been obvious for one of ordinary skill in the art at the time the invention was made to substitute the conventional toothbrush head of Urbush for one having a movable cleaning elements and first and second non-movable cleaning elements, as Hallock teaches, so that the toothbrush can resiliently conform to the inner

mouth and tooth surfaces of which the toothbrush is cleaning to better aid in the cleaning of teeth and the oral cavity.

4. Claims 85-87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urbush, US 3,316,576 in view of Hallock, US 2,266,195 and Flewitt, US 5,896,614.

Urbush discloses all elements above, however does not include a head comprising a plurality of movable elastomeric wipers disposed between first and second cleaning elements that are non-movable relative to the head.

Hallock discloses all elements above, including the teaching of a head comprising a plurality of movable cleaning elements (14) disposed between first and second cleaning elements (uppermost and lowermost tufts 16, 19 as shown in Figures 1-2) that are non-movable relative to the head. Regarding claims 86-87, the first and second cleaning elements extend from a first surface of the head (the first surface is shown rightwards in Figure 2) and the discontinuity (the opening in the head where 13 is able to move) is present and visible with reference to the second surface (the surface facing leftwards in Figure 2) of the head opposite the first (as shown in Figure 2). Hallock does not disclose that the plurality of movable cleaning elements is elastomeric wipers.

Flewitt teaches a bristle arrangement for a toothbrush wherein there are both cleaning elements of tufts of bristles (14, 15) and a plurality of elastomeric wipers (12 or 13; Column 3 Lines 40-42) disposed between groups of tufts of bristles (Figure 7). These elastomeric wiper cleaning elements are provided to improve the cleaning efficiency in brushing teeth and also are advantageous as they are unlikely to retain

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moisture that could lead to the growth of bacteria (Column 3 Line 63 to Column 4 Line 5).

It would have been obvious for one of ordinary skill in the art to substitute the conventional toothbrush head of Urbush for one having a movable cleaning elements and first and second non-movable cleaning elements, as Hallock teaches, so that the toothbrush can resiliently conform to the inner mouth and tooth surfaces of which the toothbrush is cleaning to better aid in the cleaning of teeth and the oral cavity, and further it would have been obvious for one of ordinary skill in the art to substitute the third cleaning elements of Urbush and Hallock for elastomeric wipers, as Flewitt teaches, in order to improve the cleaning efficiency and efficacy of a toothbrush and to inhibit possible bacteria growth on a toothbrush.

Response to Arguments

5. Applicant's arguments with respect to claims 45, 47-49, 77, 79-87 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Guidotti whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on (571) 272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laura C Guidotti/
Primary Examiner, Art Unit 3723

lcg